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# Public Pensions in Flux: Can the Federal Government's Experiences Inform State Responses?

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## Introduction

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In many policy-related situations, the states can be useful laboratories to determine the most appropriate federal actions. Variations across states in health care programs, earned income credit rules, minimum wages, and other policies have helped inform debates about federal interventions.

In this paper, we reverse that approach. Many state and local governments currently face difficulties financing future pension obligations for their workers. The federal government, however, faced similar circumstances in the 1980s and successfully implemented a substantial reform. We examine the situation the federal government faced and how it responded to the funding challenge. We present key aspects of the situation facing state governments currently and draw comparisons between them and the federal situation in the 1980s. Our overarching conclusion is that states experiencing distress today about the cost and funding of its pension plans could benefit from following an approach similar to the federal government's resolution of its pension problems in the 1980s.

The federal government retained the existing Civil Service Retirement System (CSRS) for existing employees and created a new Federal Employees' Retirement System (FERS) for new employees. FERS combined a less generous defined benefit plan than CSRS, mandatory enrollment in Social Security, and a new defined contribution plan with extensive employer matching. Although we do not wish to imply that a "one size fits all" solution applies to the very diverse situations that different states face, we nonetheless conclude that the elements of durable, effective, and just reforms for state pension plans will likely include the major elements of the federal reform listed above.

Section II discusses the federal experience with pension reform. Section III discusses the status and recent developments regarding state and local pensions. Section IV discusses the similarities in the two situations and how policy changes structured along the lines of the federal reform could help state and local governments and their employees.

## The Federal Pension Transition

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### *The Creation and Evolution of CSRS*

The modern U.S. civil service was created in 1883, marking the end of the "spoils era" of American politics in which most public sector employees were replaced at the end of each election cycle with workers who were sympathetic to the newly elected officials. The Civil Service initiated a merit-based public employment system and protected public workers from having their employment terminated for arbitrary reasons, including

old age (OPM 2015a, 2015c). As a result the federal work force became older and longer-tenured over time. In addition, the overall federal workforce was growing, both in absolute terms and as a share of the total workforce (Fabricant 1949). By 1920, there were many federal employees age 70 or older who, because of the rules protecting workers' employment, could not be separated from service (Hustead and Hustead 2001). There were no provisions for retirement from public service, pensions for federal workers or other public retirement programs such as Social Security. These factors led to the creation of the Civil Service Retirement System (CSRS) in 1920.

CSRS created a defined benefit plan for government workers. Covered workers were required to contribute between 7 and 8 percent of pay, with their employing agency matching these contributions. CSRS-covered employees were generally eligible to retire at age 55 (with 30+ years of service), 60 (with 20+ years of service), or 62 (with 5+ years of service). The CSRS annuity was determined by calculating a worker's "high-3" pay, "the highest average basic pay [an employee] earned during any 3 consecutive years of service" (OPM 2015a). Retirees received 1.5 percent of their high-3 pay for the first 5 years of service, plus 1.75 percent of their high-3 pay for the second 5 years of service and 2 percent of their high-3 pay for any years of service beyond 10. There was an overall limit of 80 percent of high-3 pay (which would be reached with just over 42 years of service) (OPM 2015a). Automatic cost-of-living adjustments began in 1962 and were linked to the consumer price index (CPI) (CRS 2013a).

Once it was enacted, CSRS quickly became an appealing benefit of working for the federal government. Several factors, however, led to stress in the system in the late 1970s and early 80s. First, current and projected costs in CSRS increased significantly as the government workforce expanded and aged. The number of executive branch civilian employees rose from 1.4 million in 1950 to 2.3 million in 1985 (OPM 2015b). Between 1967 and 1979, the number of primary CSRS annuitants more than doubled, and the median CSRS annuity rose by about 50 percent (adjusted for inflation). By the end of the 1970s, about one in three CSRS annuitants was under the age of 62, implying that costs would persist for a long period (Dalrymple, Grad and Wilson 1983). In addition to these trends, high inflation in the 1970s drove up salaries and, in turn, the cost of future retirement benefits.

Second, the budget crunches of the early 1980s put pressure on CSRS. Spurred by recession, tax cuts and defense build-ups, federal deficits in the early 1980s rose to their highest level as a share of the economy since World War II and the debt/GDP ratio rose from about 25 percent in 1979 to about 40 percent in 1985 (OMB 2010). Under pressure to curb spending, Congress enacted the Omnibus Budget Reconciliation Act of 1981, which included provisions for significant

federal spending cuts. The 1981 Act reduced the frequency of CSRS cost of living adjustments (COLAs) from semi-annual to annual. The annual COLAs were calculated based on December-to-December CPI changes and took effect the following March. The Omnibus Budget Reconciliation Act of 1982 delayed the annual COLA implementation by one added month in each of 1983, 1984, and 1985. The same Act restricted COLAs in some circumstances. Further acts reduced delayed COLAs again and converted the COLA calculation to the one used by the Social Security Administration, in which COLAs are based on the percent change in the price index over the preceding year (CRS 2013a).

A third factor was Social Security reform. As of the early 1980s, federal employees had always been exempt from Social Security. In January 1983, the National Commission on Social Security Reform, chaired by Alan Greenspan, recommended that all newly-hired federal employees be covered under Social Security, partly in order to help that system address both short- and long-term funding problems. By March, that recommendation was made law with the Social Security Amendments of 1983, which called for all federal employees hired on or after January 1st, 1984 to be covered under Social Security (H.R.1900). In response, as a stop-gap measure, Congress reduced the contributions that federal employees were required to make to CSRS (Cowen 2011). This gave Congress time to tackle the bigger question of reform without over-burdening federal employees in the meantime with full contributions to both the old CSRS system and Social Security.

Collectively, these and other factors led to reform of the pension system for federal workers, but the road was not easy. Earlier, in 1981, the Senate Subcommittee on Civil Service asked the Congressional Research Service (CRS) to report on various options for government employee pension reform; each of the CRS recommendations included Social Security as part of a larger retirement plan (Cowen 2011). The following year, Senator Ted Stevens (R-AK) introduced the Civil Service Reform Act of 1982, which also featured a Social Security component and called for a new, defined-contribution (DC) plan structure and private investment component (S. 2905). Federal employees generally opposed the bill. They did not want to make the switch from the guaranteed benefits of a DB plan to the potential rate-of-return risk of a DC plan, and they did not like the private investment of retirement funds proposed by Stevens' bill. The employees also saw Social Security as a struggling system and worried that by the time they retired, it would not be able to pay promised benefits. At a time when the generous retirement plan offered through CSRS was seen as one of the few financial perks of federal employment, the proposed changes added too much uncertainty and perceived unreliability (Cowen 2011). Stevens' bill did not pass, but it was a major step toward reform. And by

1984, the question of whether to incorporate Social Security into the federal retirement package had become moot.

Disagreements on these issues reflected broader philosophical differences, and compromises were hammered out by a bipartisan Congressional working group and conference sessions between the House and Senate. However, two more complicated issues presented challenges: how to handle workers in specialized occupations and how to manage the risks associated with investing government money in the private sector.

CSRS covered a remarkably diverse set of workers and jobs. There were concerns about the treatment of certain groups of employees in specialized occupations such as public safety and law enforcement, the military, and the intelligence arena (Cowen 2011). Under CSRS, many workers in those groups enjoyed enhanced benefits that took their unique or special career characteristics into consideration, and of course, those groups wanted to ensure that they received similar treatment in the future. The concerns included earlier retirement for those who worked in hazardous conditions (such as firefighters and police officers) and proper security protocols for those who supported covert missions (such as CIA operatives). Ultimately, it was decided that when the next reform bill was introduced on the Senate floor, it would not address these specific issues. Instead, federal agencies with such concerns would offer amendments to the reform bill via the appropriate Congressional committee (Cowen 2011). Additionally, there were trepidations about Stevens' proposal to create a Civil Service Pension Fund that would be invested in both government bonds and private assets. Some worried that investing large amounts of federal funds in the private sector could create a "federal monster" that exercised too much influence over the market (Cowen 2011).

### *The Creation and Implementation of FERS*

Senators Stevens and Roth (R-DE) introduced S. 1527 in July 1985. Congress enacted the bill in June 1986 and President Reagan signed it into law the same month. The new law, which took effect on January 1st, 1987, created the Federal Employees' Retirement System (FERS), a new system that includes all federal employees hired on or after January 1st, 1984 and federal workers who were hired before that date and chose to voluntarily switch over from CSRS. Unlike CSRS, which consisted of only a defined benefit plan, FERS offered a three-pronged approach to retirement: Social Security benefits, a smaller defined benefit plan than the one offered through CSRS, and the Thrift Savings Plan (TSP), a defined contribution platform. The legislation also included special provisions for people with careers in law enforcement, firefighting, air traffic control, and other specialized fields (OPM 1998).

Two of the three FERS components (Social Security and

the TSP) are portable and move with the employee as he or she changes jobs either within or outside of the federal government (Table 1). Two components (Social Security and the DB plan) require employees to contribute part of their pay to the system. TSP is voluntary, but it depends heavily on employee contributions.

Participants accrue benefits in the defined benefit plan at slower rates than in CSRS. After the most recent FERS reforms, workers accrue a benefit equal to 1 percent per year of service, or 1.1 percent for workers retiring at age 62 or later with 20 or more years of service.

The TSP operates like a private sector 401(k). Initially, participants could only make contributions using the traditional tax treatment where contributions and investment gains were tax-free and taxes are paid on withdrawal. More recently, TSP has added a Roth option where contributions are after tax, with gains and withdrawals being tax exempt. Starting in August 2010, all newly hired or re-hired federal employees are automatically enrolled into TSP and contribute 3 percent of their pay to the system.

The government makes a 1-percent-of-salary unconditional contribution for each employee and then matches the first 3 percent of salary in an employee's contribution on a 1-1 basis and the next 2 percent of salary on a .5-1 basis. Employees can contribute up to \$17,500 per year (plus an extra \$5,500 for those over the age of 50). Voluntary participation in the TSP among FERS beneficiaries approaches 90 percent and as of October 2014, the TSP included about 4.7 million active and retired participants (CRS 2015a). When TSP began operations in April 1987, it only offered investment in the G Fund (government securities). In January 1988, TSP began to offer both the F Fund (fixed-income securities), and the C Fund (common stocks) (Schreitmüller 1988). At first, participants were limited to only placing a portion of their savings in these two funds, but all such restrictions ended in January 1991. Starting in May 2001, TSP added both the S Fund (a stock index fund of small- to medium-sized businesses), and the I Fund (a stock index fund that replicates the Morgan Stanley Capital International EAFE Index). Several Lifecycle ("L") Funds that offer various combinations of investment in the G, C, F, S, and I Funds that change as the investor ages were added in 2005 (CRS 2015a).

While it was originally viewed as a step down from the rich benefits offered through CSRS, FERS in many ways offers better benefits for many workers, including those who spend only a portion of their career with the federal government, those who are not with the federal government at the time of their retirement, those who work beyond the standard retirement age, and those who are savvy investors (Flanagan 2015). Under CSRS, annual benefits for a regular federal worker with 30 years of service equal 56.25 percent of a retiree's high-

three average pay (CRS 2014a). Under FERS, benefits accrue in all three components of the program. A worker with 30 years of service retiring at age 62 or later would receive 33 percent of high-three average pay from the defined benefit plan. In addition, if the worker contributed 10 percent of wages to TSP and earned a 6 percent (nominal) return, benefits from the defined contribution account would equal about another 32 percent of high-three average pay. And, of course, the worker would receive social security benefits as well.

Some FERS retirees receive annual benefits equal to as much as 128.2 percent of high-three average pay (CRS 2013b, SSA 2014). FERS also tends to be more generous than private sector plans. "Most people in the United States, if they understood what was going on, would be extremely jealous of the benefits that FERS employees have" (Stein 2012). Brown et al. (2011) note that career employees in the public sector tend to receive retirement benefits that are "substantially higher" than those their private sector counterparts receive.

Figures 1a, 1b, and 1c illustrate difference in FERS and CSRS costs to employers and employees. Overall, FERS costs are very close to CSRS costs. CSRS costs 29.3 percent of payroll, of which 22.3 percent comes from the employer and 7 percent from the employee. The DB portion of FERS costs 14 percent of pay for employees hired before 2013, and 14.2 percent of pay for employees hired in 2013 or later.<sup>1</sup> The government also pays the 6.2 percent of taxable payroll that all employers contribute towards Social Security and a maximum of 5 percent of salary in TSP contributions (1 percent in unconditional contributions and up to 4 percent in matching contributions). All told, FERS costs between 27.6 percent and 31.6 percent, depending on the extent to which employees take advantage of TSP matching contributions.

FERS costs the government as the employer less than CSRS. CSRS costs the government 22.3 percent of payroll, while FERS costs the government between 21.2 and 25.4 percent of payroll (depending, again, on the extent to which employees take advantage of TSP matching contributions).<sup>2</sup> On the other hand, FERS costs employees more than CSRS does. Employees contribute 7 percent of pay under CSRS, and a total of 10.6 percent of pay (4.4 for the DB plan and 6.2 for Social Security) under FERS, excluding optional contributions to the TSP. The cost of these combined retirement benefits has caused some in Congress to propose either further reduction in the FERS defined benefit or its elimination.

<sup>1</sup> For FERS employees hired before 2013, the government contributes 13.2 percent of pay and employees contribute the remaining 0.8 percent. For FERS employees hired in 2013, the government contributes 11.1 percent of pay and employees contribute the remaining 3.1 percent. For FERS employees hired after 2013, the government contributes 11.1 percent of pay and employees contribute 4.4 percent. The "extra" 1.3 percent of pay (= 11.1+4.4-14.2) goes towards the CSRS unfunded liability (CRS 2015b).

<sup>2</sup> According to a 2013 survey, 91 percent of FERS employees actively participating in the TSP contribute 5 percent or more of their pay and max out their matching contributions (Aon Hewitt 2013).

While no action has been taken on this, the cost remains a concern to some legislators.

Surveys indicate that current FERS participants strongly support the plan. In an OPM (2013) survey, 85 percent of federal employees described the TSP as “extremely important” and 76 percent felt the same way about the FERS defined benefit plan. In the same survey, over two-thirds of respondents said that the TSP met their needs “to a great extent,” while just under half said the same of the defined benefit plan. Almost 79 percent of respondents described the TSP as a good or excellent value for the money, and almost 57 percent described the DB plan in those terms. The TSP is consistently the most popular federal employee benefit program, and the FERS DB plan is among the top three most popular (OPM 2013b). This seems to point to a major increase in support for FERS over the last three decades; even though when the FERS legislation gave existing federal employees the opportunity to switch from CSRS to the new program, only four percent of eligible employees voluntarily made the transition (Cowen 2011).

The creation of FERS did not do away with, or even change, CSRS. Employees who were in that plan could stay in it. As of 2013, about 90 percent of federal civilian and Postal Service employees (2.5 million) participated in FERS, with the remaining 10 percent in CSRS. CSRS will continue to exist until its beneficiaries pass away.

Several other issues with regard to FERS are worth noting. First, FERS benefits are pre-funded through contributions from the government and the employees. When FERS was created, pre-funding was required to force agencies to recognize these costs in their budgets. CSRS benefits are partially pre-funded, but the cost of benefits exceeds employer and employee contributions plus earnings on assets in the trust fund.

In FY2014, the Civil Service Retirement and Disability Fund (CSRDF) reported an unfunded liability of \$785 billion (CRS 2015a), of which the overwhelming majority is for CSRS (CRS 2015a). Annuities for both CSRS and FERS are financed through the CSRDF. Despite this major unfunded liability, however, OPM reports that the CSRDF is not at risk of insolvency (CRS 2015a). The trust fund is expected to grow for at least 65 more years, “at which point it will hold assets equal to more than 5.3 times total payroll and about 20 times total annual benefit payments” (CRS 2014a). However, the CSRDF is invested solely in government bonds, so like the Social Security trust funds, its earnings come from other federal revenues.

Second, the transition from CSRS to FERS has been successful, but it encountered some administrative hurdles along the way. The most serious challenge was the fact that even after January 1st, 1987 some new federal hires were mistakenly placed in CSRS by their agency HR offices. The problem was ultimately resolved

with the Federal Erroneous Retirement Coverage Corrections Act (FERCCA), which President Clinton signed in late 2000. FERCCA gives those employees who were wrongly entered into CSRS—and who spent at least three years in federal employment in 1987 or later—the option to either remain in CSRS or switch into FERS. FERCCA also provides some additional benefits that are meant to offset the costs associated with the mistaken retirement plan assignment (OPM 2015d).

Third, a recent issue with both CSRS and FERS is the introduction of phased retirement. OPM started accepting applications for the new program in November 2014; approved workers could then switch to half-time employment and receive a proportionate salary and half of their DB benefits. CSRS retirees are positioned to benefit from this by more than FERS retirees because the Social Security component of FERS does not accommodate early or phased retirement. For CSRS retirees, the entire retirement package is available for phased retirement; for FERS retirees, only a portion is (Yoder 2014).

In general, the CSRS-to-FERS transition has been smooth. Even though we are decades away from the complete phase-out of CSRS, the most challenging parts of the transition are likely in the past.

## Pensions for State and Local Government Workers

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### *Historical Development*

The earliest public pensions for state and local government workers (SLGWs) predate the creation of CSRS in 1920. Clark et al. (2003) report that several large cities started offering retirement and disability benefits to public safety officers, teachers, and other workers in the mid-1800s. In 1857, police officers in New York City became the first group of civilian employees to participate in a public retirement plan for local government employees (Rajnes 2001). In 1911, Massachusetts created the first pension plan for general state employees.

Even so, it took some time for public pensions to become de rigueur among the states. By 1930, only six states had created public pension systems for their civilian employees, and it took until 1947 for all states to offer plans (Rajnes 2001). As of March 2014, the take-up rate of retirement benefits among state and local government workers was 91 percent (BLS 2014).<sup>3</sup> This slow path towards nationwide retirement coverage for employees of state and local governments, lagging well behind the Federal government’s creation of CSRS, may not be surprising, considering the diverse situations across

<sup>3</sup> This figure includes both DB pension plans and DC retirement plans. The take-up rate of DB plans and DC plans were 89 and 48 percent, respectively, in March 2014 (BLS 2014).

states as well as the piecemeal nature (state-by-state, locality-by-locality) of these policy changes.

Despite its gradual enactment, the pension system for SLGWS has grown steadily and dramatically over the past 50 years. The number of state and local pension plans rose from less than 2,400 in 1962 to almost 4,000 in 2013 (Rajnes 2001; Census 2013).

The number of workers participating in state and local government pension plans has grown even more dramatically. In 1962, there were just over 5 million participants. The number of participants rose steeply and steadily between 1962 and 1997, approximately doubling between 1962 and 1977, and again between 1977 and 1999 to exceed 20 million participants (Rajnes 2001). However, between 1999 and 2002 the number of participants dropped by about 20 percent (Rajnes 2001; Census 2002). Since the early 2000s, though, the number of participants has trended upwards again, though less steeply than in the decades before the dot-com bubble (Census 2002, 2007, 2013). As of 2013, there were about 19.5 million participants. Figure 2 shows these trends.

However, while overall participation in state and local pension plans has been rising steadily for decades, active participation saw only modest gains between 1997 and 2009, and in the post-crisis years has been slowly declining.<sup>4</sup> Over the same period, the number of beneficiaries rose steadily (Census 1993-2013). Figure 3 below shows that the gap between active participants and beneficiaries has been steadily narrowing, and in 2013 was less than 68 percent the size of the gap in 1993. As this trend continues and the number of retirees approaches the number of active participants, underfunded state and local governments will face even greater difficulties in meeting benefit payments.

Funding levels of state and local pension plans have also fluctuated over the years. The first comprehensive review of state and local pension plans was conducted in 1978 and revealed an average funding ratio of 50 percent (Peng 2008). During the 1980s and 1990s, funding ratios improved gradually, peaking in excess of 100 percent in 2001 after several years of rapid economic expansion and strong stock market growth (Peng 2008; CBO 2011; GAO 2012). Funding ratios fell in the early 2000s following the collapse of the dot-com bubble and hovered in the mid-80s until the 2007-09 financial crisis (CBO 2011, GAO 2012). During that crisis, funding ratios declined significantly. Current funding levels are discussed further below. Brown et al. (2011) describe the 2007-09 financial crisis as “the proximate cause of the current funding problems facing many state and local pensions.”

In addition, however, longer-standing dysfunctional policies have played an important role in current funding problems. For example, Schieber (2011) reports that during fiscal year 2009, the states on average contributed 10.7 percent of payroll to their pension plans, about 15 percent less than the average actuarially required contribution of 12.6 percent of payroll.<sup>5</sup> This type of chronic underfunding occurs in both good time and bad, creating a financial hole that becomes almost impossible for the state or local government to fill without severe reductions in other services. Elliott (2010) points to short-term political horizons and public apathy as important factors in the failure to provide adequate funding for pensions.

Additionally, state and local governments have often raised retirement benefits when they are flush with cash—such as during economic booms—but are generally loathe—or unable due to legal protections of pension benefits—to decrease them when their budgets are tight—such as during recessions (Schieber 2011). This problem is mainly a political one, and is affected by the presence of strong unions and politicians’ irresponsible spending habits: “As it turns out, many lawmakers found that increasing pensions was very good politics. They placated unions with future pension commitments, and then turned around, borrowed the money appropriated for the pensions, and spent it paying for public services in the here and now” (Disalvo 2010). Also, because many states’ pension obligations are constitutionally or otherwise guaranteed, reforms passed at the 11th hour to resolve serious fiscal distress are unlikely to succeed (Disalvo 2010).

Pew (2014a) reports that the structure of public pension investments is also changing. Between 1952 and 2012, allocations to fixed income and cash fell while allocations to equities and alternative investments rose. Since 2002, the share of allocations to equities and alternative investments has exceeded 60 percent. Fixed-income investments are generally low-risk and low-reward; equities offer more risk and more opportunity for reward; and alternative investments tend to be high-risk and high-reward. This shift towards riskier investments puts some pension plans in an even more precarious position and makes the need for reform more urgent. Economic downturns tend to bring with them a variety of fiscal problems for state and local governments. Adding potentially serious losses to their pension plans due to high-risk investments only fuels the fire. It is easy to justify increased allocations to equities and alternative investments when the economy is performing well and these allocations are generating high rewards. However, state and local governments normally would benefit from taking a longer view on pension investments to avoid compounding future budgetary issues.

<sup>4</sup> Active participants are current workers and/or contributors to a pension system. Inactive workers are former contributors who have left the system but have not yet started receiving retirement benefits. Overall participation includes active participants, inactive participants, and beneficiaries.

<sup>5</sup> During the same time period, the states on average contributed 3.5 percent payroll to retiree health insurance plans, about one third of the average actuarially required contribution of 10.5 percent of payroll (Schieber 2011).

## *Recent Policy Changes and Current Status*

Motivated primarily by fiscal distress, over 35 states and many local governments have made some reforms to their pension programs in recent years (GAO 2012). Munnell et al. (2014) distinguish recent pension changes by the underlying goals: (1) reduce existing defined benefit plan costs and (2) shift all or part of a given pension program into a defined contribution format. The first type of reform often takes the form of increased employee contributions, reduced benefits for new hires, suspended or reduced cost-of-living adjustments, and/or increased age and tenure requirements (Bradford 2014). The second type of reform has shifted in scope and intent in recent years. Munnell et al. (2014) note that before the 2007-09 financial crisis, states were introducing optional DC plans. But in the aftermath of the crisis, many states have focused primarily on proposing mandatory DC plans that affect or would affect only new hires. The pre-crisis proposals, they note, were designed to give employees more retirement planning choices; the post-crisis proposals, on the other hand, have been designed almost exclusively to reduce costs. Even though these defined contribution proposals have generated significant press attention, Munnell et al. (2014) describe overall activity to date as “modest.” Most states that introduced pension changes have focused on new mixed plans including both DC and DB components and on cash balance plans rather than on a full-on transition from DB to DC.

McGuinn (2014) reviews recent public pension reforms in four states, ranging from major changes in Rhode Island and Utah to less significant moves in New Jersey and Illinois. Rhode Island made the most radical reforms despite the fact that it is both heavily Democratic and has some of the strongest public employee unions in the country. The state ended up creating a new DC plan to work in conjunction with a reduced DB plan, suspended DB COLAs until the plan reached at least 80 percent funding although that decision will be reviewed every five years, reduced the vesting period to qualify for a pension from 10 years to 5, and increased retirement ages for existing employees.

Utah, a heavily Republican state, closed its DB plan to new hires and replaced it for new employees with either a DC plan or a mixed plan that incorporated both DB and DC elements. Workers who failed to choose would be placed in the mixed system. Reform proponents recognized that both plans would produce less generous retirement benefits, and the state also offers a supplemental savings plan with no employer match. Clark et al. (2015) report that employees of Utah hired after the reform were less likely to stay in public employment for the long term, and they suggest that the reform may have made public employment in Utah less attractive. We review these concerns again in Section IV.

Both Illinois and New Jersey made much less ambitious piecemeal reforms focusing on contributions from employees, COLAs, etc. However, both states' reforms are at risk. In New Jersey, Governor Christie refuses to make the full state contribution to the plan and in June 2015 the state's Supreme Court ruled that he could legally skip these contributions (Zernike 2015). Meanwhile, New Jersey has the least-funded public pension system in the country and has endured nine credit downgrades since Governor Christie's tenure began in January 2010 (NASRA 2015, Zernike 2015). In Illinois, state courts have ruled that even the partial reforms violate the state constitution, regardless of the fact that public pension there are in some of the worst shape in the nation. Brown and Dye (2015) find that the problems facing Illinois today are primarily the result of inadequate contributions, and they note that the state's public pensions were used almost as a loan so that the state could maintain lower taxes and higher spending. They conclude by finding that even if Illinois had successfully reformed its pension system in 2013, the outcome would have been the same: over time more and more of Illinois' budget will need to go towards its pension problems at the expense of other state spending programs.

Despite these recent changes, many states continue to face serious pension underfunding. Novy-Marx and Rauh (2011) estimated that as of June 2009, the shortfall was between \$1.2 trillion and \$2.5 trillion, depending on the discount method. They later estimated that in order to achieve full funding over 30 years, taxes would need to increase by \$1,385 per household per year (Novy-Marx and Rauh 2014). Pew (2014) calculated a total shortfall of \$915 billion and an average funding ratio of 72 percent, meaning that the assets that state pensions funds have set aside are only sufficient to cover 72 percent of their liabilities. State Budget Solutions (2014a) reported a shortfall of \$4.7 trillion and a funding ratio of just 36 percent. The difference in findings is due largely to different ways of discounting future liabilities. State Budget Solutions uses a rate based on the long-term (15 year) Treasury yield, implicitly assuming that state pension benefits are riskless. In contrast, Pew uses the figures where public plans discount their liabilities according to their assumed investment return, which is typically between 7 and 8 percent. The variation in calculations is substantial, but even the more modest numbers reported by Pew reveal a serious problem for certain states with extremely poor funding ratios. For example, Pew (2014) reports that Illinois, Kentucky and Connecticut have the lowest funding ratios: 40, 47 and 49 percent, respectively. Not every state is in a dire situation—but those that find themselves with a big underfunding problem are likely to need pension reform sooner than later. Table 1 shows which states have the largest unfunded liabilities, lowest funding ratios, and lowest percent paid of the Actuarial Required Contribution (ARC)—the contribution required annually to fully fund promised pension benefits.

## Comparing the Federal and State Situations

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There are a very limited number of ways in which these underfunding problems can truly be resolved, and the most reliable options—cutting benefits and/or raising employee contributions—are the most unpleasant from the perspective of workers. States will naturally look for clever ways to avoid such painful changes. For example, they might hope for a federal bailout of pension liabilities. This seems inappropriate, however. States as employers make their wage and pension agreements with their employees. Having the federal government step in *ex post* does not seem advisable, and it would set a very difficult precedent for the federal government: If the federal government helped one state in this regard, it would soon find 49 more states and a large number of municipalities and counties asking for the same assistance. The federal government might then use the bailout as a reason to micro-manage not only state pension plans and agreements with their employees, but eventually other aspects of state financial and policy decisions.

A second way states may try to avoid such difficult choices is taking on even more investment risk in their pension funds in hopes of seeing greater average returns on their assets. In general, this would not be well-advised, for two main reasons. First, the share of state pension assets allocated to riskier investments is already substantial: in 2012, 50 percent of public pension fund portfolios were allocated to equities and 23 percent were allocated to alternative investments (Pew 2014a). Second, the liabilities that states face share many characteristics with bonds rather than equities or alternative investments. Liabilities may be rising over time, but they are not especially volatile on an annual basis. Therefore, financing liabilities with investments that could fluctuate dramatically with changing market conditions adds unwanted risk into the equation. Biggs (2014a) notes that in many states—regardless of political party—treasurers and other senior officials are resistant to proposals to increase contributions and decrease risk. Others echo this sentiment, suggesting that investment decisions made today skew future outcomes. Even though chances of a positive outcome persist, they are dramatically outweighed by chances of a negative outcome (Novy-Marx and Rauh 2009).

Of course, there is a fairly extensive debate on ideal investment choices for state and local pension plans, and not all experts agree that states should avoid making high-risk investments. For example, Dean Baker (2013) of the Center for Economic and Policy Research argues that state and local governments should be primarily concerned with average returns in the long run rather than short-term market fluctuations.

Lucas and Zeldes (2009) provide an excellent overview of both sides of the debate and conclude with arguments “for holding a portion of pension assets in higher returning [and higher risk] equities.”

In many ways, the situations in the states with underfunding problems today compares closely to the one faced by the federal government in the early 1980s. Besides the most obvious consideration – the presence of sizable pension shortfalls – both the states now and the federal government then face the problem of ensuring appropriate and adequate retirement for an extremely diverse work force. They also both face the need to attract and retain high quality employees. Government workers perform a wide variety of jobs. Some work in highly specialized occupations – such as law enforcement and firefighting – and have unique retirement needs.

Second, within states, there are fundamental political disagreements about how generous and costly a pension plan should be, just as there were within the federal government during the 1980s. Many state and local government workers (SLGWs) strongly oppose pension reform, as did all but the senior-most federal employees when changes to CSRS were first considered. Many workers worry that they will lose out in pension reform, and that despite the increased portability and diversification offered through some reforms, their ultimate retirement benefits could be less generous. The resulting political obstacle to reform among many workers is a characteristic of the environment the states face currently, as the federal government did in the 1980s.

A third issue for certain state and local government workers is that they are not covered by Social Security. At the time of the federal pension reform, all federal workers had just been covered. Indeed, as noted above, coverage of federal workers brought about a reduction in employee contributions to CSRS, as a short-term fix to avoid over-burdening workers. This development sped up the clock for pension reform and helped generate passage of the legislation authorizing FERS shortly thereafter. Currently, about a quarter of the 24 million state and local government workers are not covered by Social Security (CRS 2011).

Fourth, a number of existing state DB plans, like the federal CSRS system, tend to be more generous than their private sector counterparts. Biggs (2014) reports that, “for employees who spend a career in state government, generous pensions put retired public workers among the highest earners in their state.” Schieber (2011) discusses the theory and evidence supporting the idea that states may compensate for a lack of Social Security coverage by offering correspondingly better pension benefits. States where lower percentages of SLGWs participate in Social Security tend to offer higher overall pension benefits (Gale et al. 2015). Due to the costly nature of these state DB plans, some states are now considering pension reform that would ease their

budgetary issues and bring state and local government workers into closer alignment with their federal government and private sector counterparts. Costliness made CSRS difficult for policymakers to justify, and it makes many state pension programs hard for state legislators to defend. Even though private sector retirement plans have been trending away from defined benefit and towards defined contribution, most public sector pension plans remain defined benefit (Butrica et al. 2009; National Institute on Retirement Security 2010). Of course, policy changes that decrease the overall generosity of a state or local pension package will have other implications, some of which are undesirable. For example, as Clark et al. (2015) suggest, these changes could make government employment less attractive to job seekers and could make workers more likely to exit public sector work altogether.<sup>6</sup>

Fifth, in the aftermath of the financial crisis, many states are still facing serious overall budgetary pressures, just as the federal government did the early-1980s. The National Association of State Budget Officers (NASBO) (2014) reported that although the states' fiscal situation is now relatively stable, a combination of slow revenue growth and increasing spending persists. NASBO (2015) reported that, "budgets have been constrained by factors such as the decline in the price oil, lower than anticipated revenue growth, federal uncertainty, and continued pressures from long-term obligations." States have already been forced to make difficult budget cuts and consider tax increases. Bosman (2015) notes that although the economy is in its sixth year of recovery since the 2007-09 financial crisis, many states are still struggling. "In some states, lawmakers have gone into overtime with unresolved budgets, special sessions and threats of widespread government layoffs. Only 25 states have passed budgets, according to [NASBO]." She also writes that far more Republican-led states than Democrat-led states are facing serious budget pressures (23 compared to 7).

The similarity between the states' situations now and the federal government's in the 1980s suggests that a reform along the same lines as those introduced in FERS could provide a suitable model for states to follow. The key elements of such a reform are clear:

- Leave existing workers in the unchanged old defined benefit system;
- Create a new defined benefit system that is somewhat less generous and less costly;
- Enroll all workers in Social Security who are not already in the program; and
- Create a defined contribution plan with generous matching contributions.

We take these points in turn. First, maintaining CSRS

contributed to the success of FERS. By ensuring that current employees and retirees already drawing a pension could continue to participate in CSRS without major changes to that program, Congress removed a source of potential opposition to reform and ensured that the reforms were fair to existing workers, who had paid in and participated under the CSRS. In 1986, many federal employees were still skeptical about the new system – as evidenced by the fact that only four percent voluntarily transferred into FERS – and a forced transition would likely have created significant political resistance. State legislators can use the federal government's experience as an example of how to orchestrate a successful, albeit slow, phasing out of their existing DB system.

The three-part combination of a DB pension, Social Security, and a DC plan has much to offer. Policy changes that only reduce DB plan costs or eliminate those plans altogether will help rein in state budgets, but they will leave workers poorly prepared for retirement. This may render such reforms politically infeasible and therefore unlikely to survive long-term. It is important for legislators to look beyond just costs, and to ensure that the remaining type and size of DB benefit provides significant retirement benefits when combined with the other elements of the reform. Reforms that omit universal Social Security coverage will fail to provide an important element of retirement security, disability, and survivors insurance to workers (see Gale et al. 2015 for further discussion). The increased portability offered through Social Security may also make employment with state and local governments more palatable for workers (particularly mid-career workers) and improve governments' ability to hire and retain qualified, expert employees. Reforms that omit DC coverage will be passing up what has turned out to be an extremely popular element of the federal program, and would make state government retirement arrangements quite different from the typical private sector retirement plan. Moreover, the investments risks associated with DC plans are reduced considerably when a worker can also expect to receive both a DB pension and Social Security benefits upon retirement. Inclusion of a DC plan will also provide an important framing device; as with the federal government's transition from CSRS to FERS, the TSP was popular, presumably at least in part because it allowed public sector workers to enjoy the same potential rewards as their private sector counterparts. A key element in this popularity is TSP's very low administrative fees and the presence of only carefully selected investment options that are suitable for retirement saving. Because of the autonomy offered by a plan like the TSP, this could help make pension reform more palatable for many. States that encourage workers to choose from a variety of benefit options may enjoy more success than those that simply default employees into a program (Choi et al. 2002; Beshears et al. 2011).

Diversifying SLGWs' retirement portfolio into three components also helps insulate them from risk in the market place and the political arena. This was the logic

<sup>6</sup> For a review of the role pensions play in recruiting and retaining workers, see Munnell, Aubry and Sanzenbacher (2014).

behind the FERS approach that relies on Social Security, a DB plan, and the TSP (Cowen 2011). A more diversified retirement package would also better protect workers and retirees from a temporary or permanent loss of benefits (such as seen in Prichard, AL), and would help states balance their budgets by reducing DB benefits.<sup>7</sup> Currently, state and local pensions are often treated as a political “third rail” because workers fear the loss or reduction of their promised benefits. However, if state and local governments could offer their employees better retirement packages that also happen to be more cost-effective, they would likely see reduced opposition to reform.

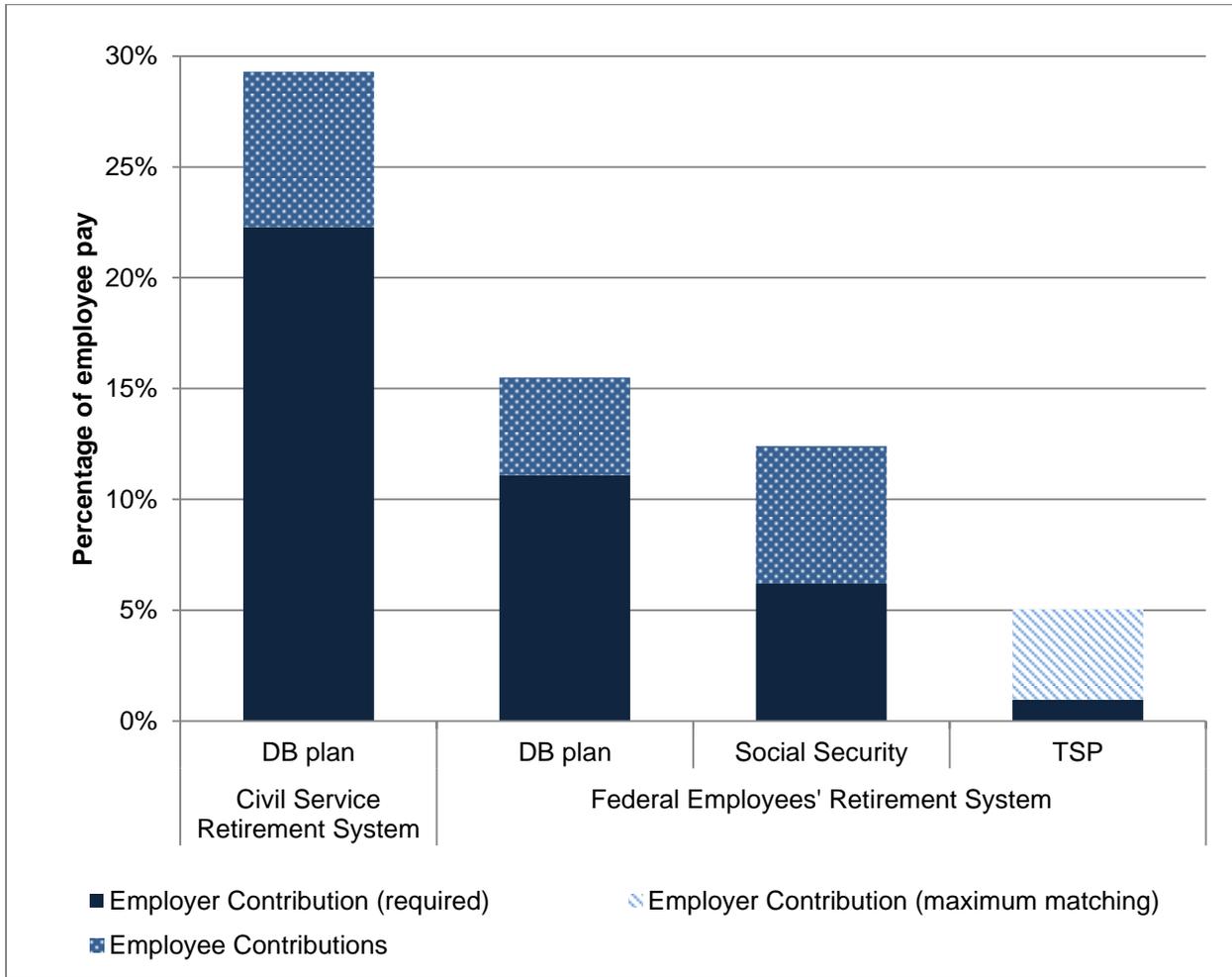
McGuinn (2014) notes that pension changes should be framed as ultimately in the best interests of pension participants relative to the consequences of the pension plans getting to the point where they can’t meet their obligations. He also suggests avoiding making state and local pension reform an ideological issue, focusing on factual financial information instead to justify changes. State legislators could make pension reform more acceptable by emphasizing that changes along the lines of the federal reform would be advantageous to SLGWs. In order to avoid an exodus of key employees from the public sector into the private sector, state legislators should take care to ensure that SLGWs feel included in the process and likely to benefit rather than suffer from reform. As DC retirement plans become the accepted standard across all sectors of the economy, both the relatively generous DB plans that most states offer and the absence of DC plans will become more challenging to justify. State and local governments can use that momentum to their advantage in order to craft reform policies that appeal to many stakeholders.

We certainly do not wish to imply that there is a single strategy to pension reform for every state and municipal government. Each state faces a different pension, political, and economic situation and has its own traditions and norms. The results of any reforms must be thoroughly monitored to ensure that they adequately address a state’s fiscal issues and that any negative effects are quickly identified and appropriately handled. Nevertheless, states that find themselves in difficult situations today might learn valuable lessons from the federal government’s CSRS-to-FERS transition. States in relatively comfortable situations today may be better prepared for the future if they keep the federal government’s transition in mind as they move forward. Even allowing for variation in program design, the basic building blocks for effective reform could well be consistent across states and consistent with the federal government’s response in the 1980s.

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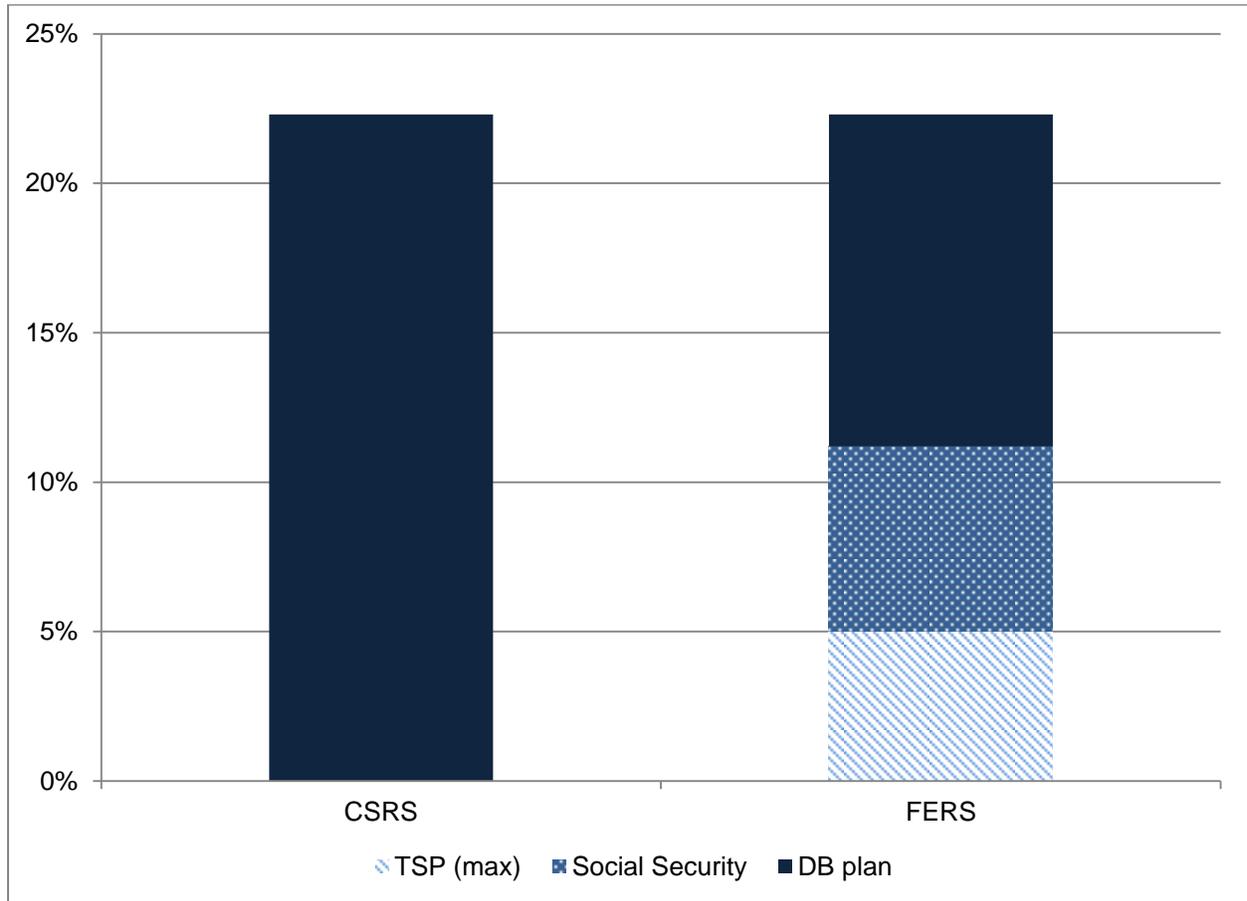
<sup>7</sup> In 2009, Prichard, AL’s pension fund ran out of money. For over a year, it was unable to make benefit payments to its retirees. Eventually payments were reinstated, but they were much smaller than they had been before. (Cooper and Walsh 2010; State Budget Solutions 2013).

**Figure 1a.**  
**Comparison of Employer Vs. Employee Contributions in**  
**CSRS and FERS**



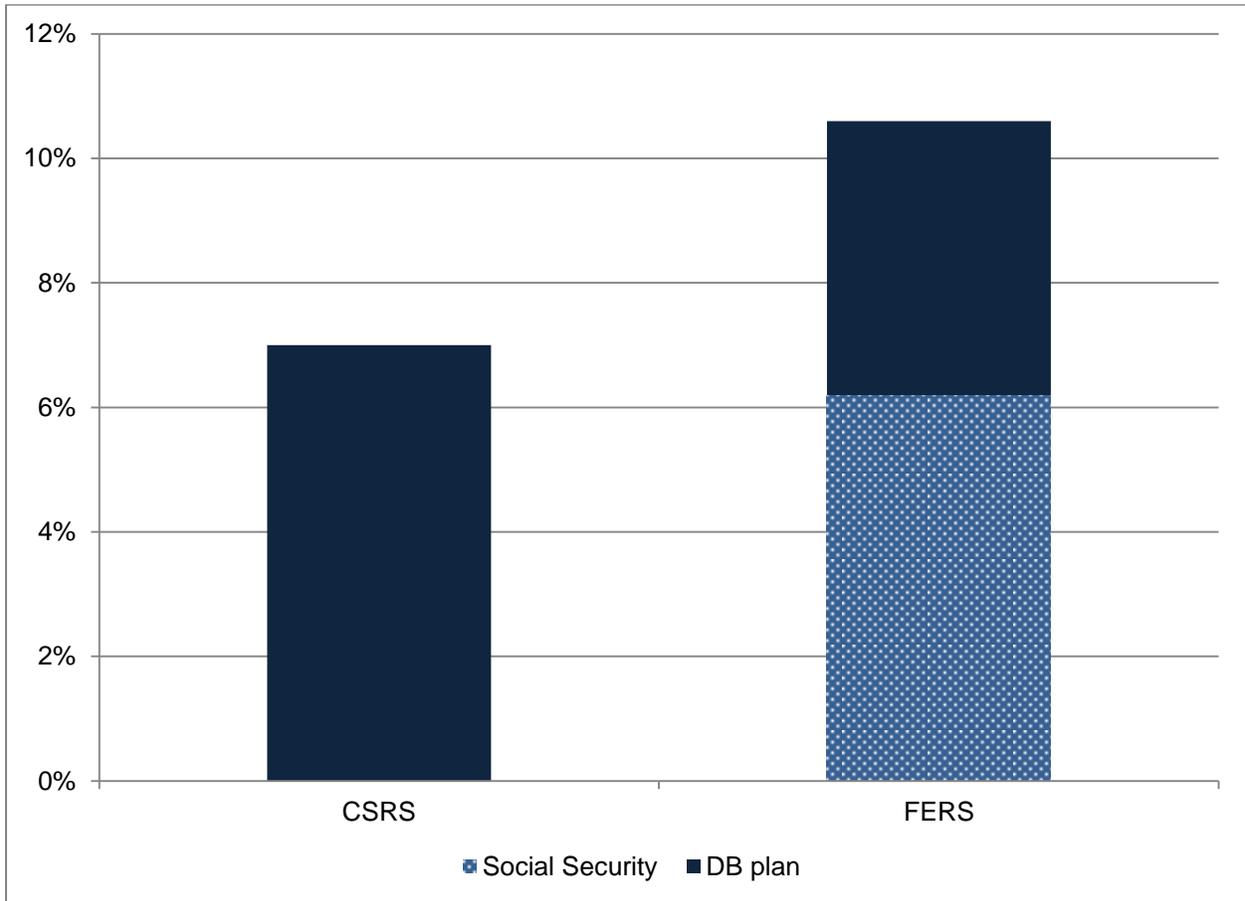
Source: CRS (2015b)

**Figure 1b.**  
**Comparison of Employer Costs in CSRS and FERS**



Source: CRS (2015b)

**Figure 1c.**  
**Comparison of Employee Costs in CSRS and FERS**



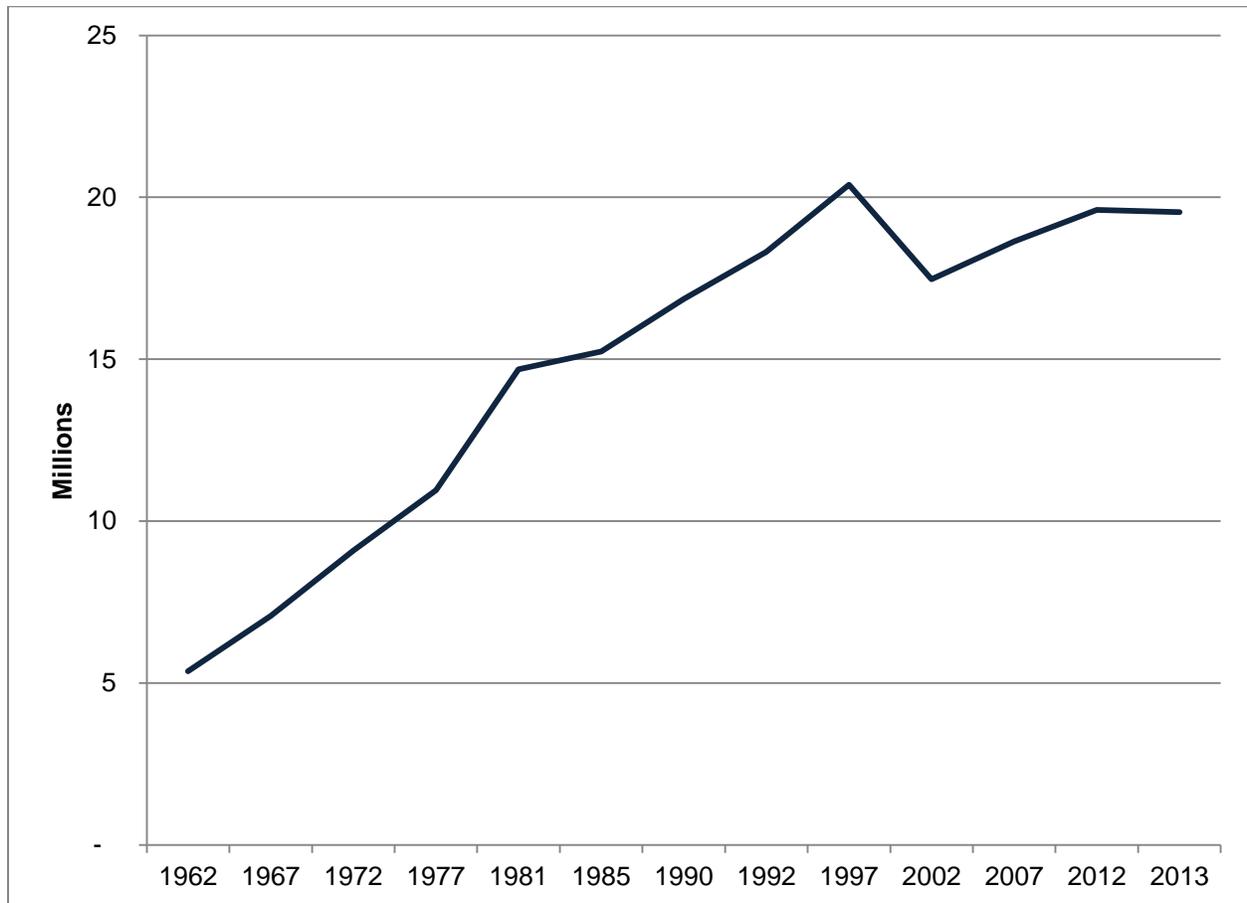
Source: CRS (2015b)

**Table 1. States with the largest unfunded liabilities, lowest funding ratios, and lowest percent of ARC paid in 2012**

Largest unfunded liabilities (in millions)		Lowest funding ratios		Lowest percent of ARC paid	
California	\$131,318	Illinois	40%	New Jersey	39%
Illinois	\$94,582	Kentucky	47%	Pennsylvania	43%
Ohio	\$63,143	Connecticut	49%	North Dakota	53%
Pennsylvania	\$47,286	Alaska	55%	Ohio	57%
New Jersey	\$47,209	New Hampshire	56%	Virginia	59%
Texas	\$31,670	Kansas	56%	Florida	59%
Michigan	\$31,159	Louisiana	56%	Kentucky	65%
Florida	\$28,956	Rhode Island	58%	Kansas	67%
Virginia	\$28,138	Mississippi	58%	Montana	69%
Massachusetts	\$28,104	Hawaii	59%	Texas	69%

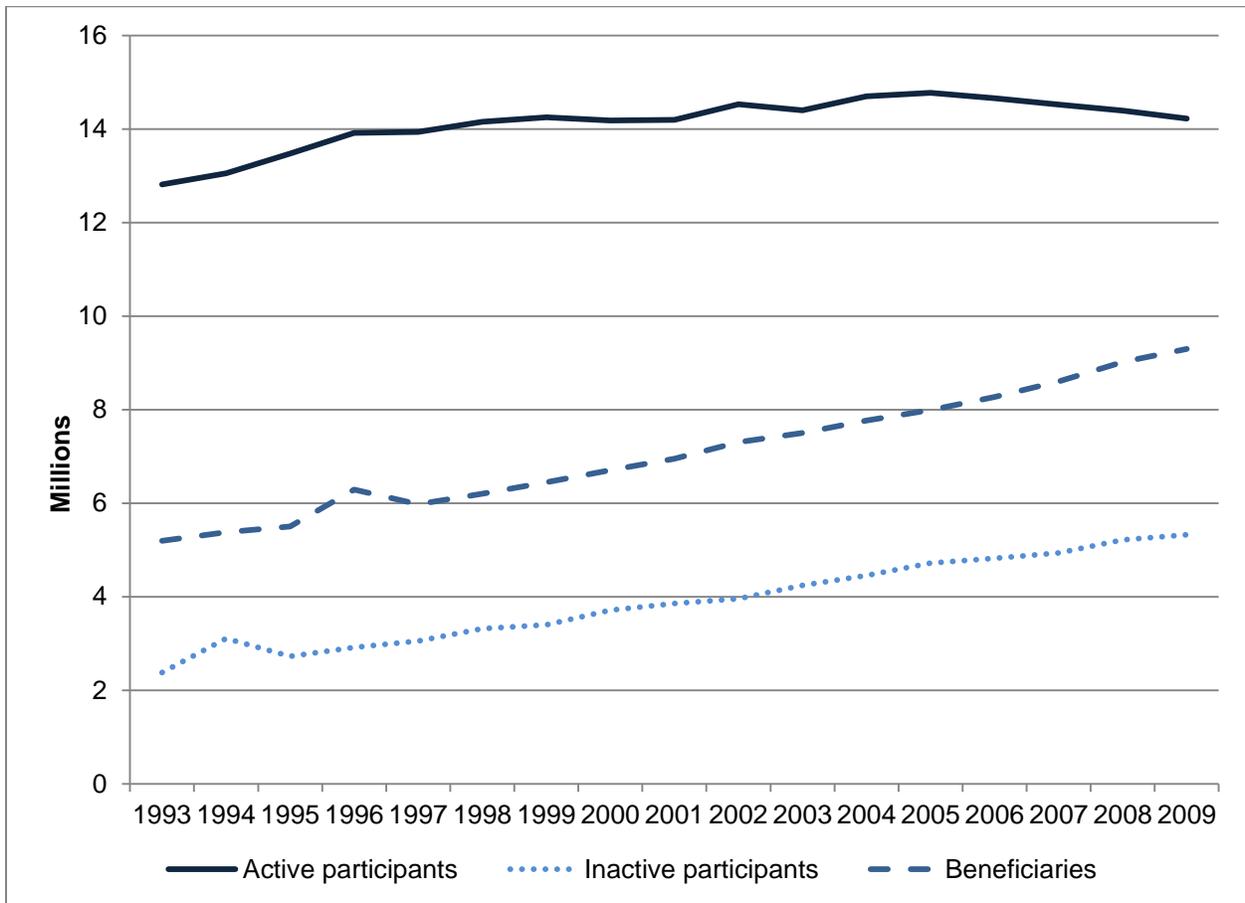
Source: Pew (2014b)

**Figure 2.**  
**Number of state and local retirement system participants,**  
**Selected years, 1962-2013**



Source: Rajnes (2001) and Census (1993-2013)

**Figure 3.**  
**Active participants, inactive participants, and beneficiaries of state and local pension systems, 1993-2013**



Source: Census (1993-2013)

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